

# EXPRESSIONS

## QUICK CHECK

Name \_\_\_\_\_

Date \_\_\_\_\_ Pd \_\_\_\_\_

1. Which expression is equivalent to  $4(2x + 3)$ ?

- A.  $4 + 2x + 4 + 3$       B.  $8x + 12$       C.  $8x + 3$       D.  $4 + 2x + 12$

2. Amanda simplifies the following expression and shows her work below. What mistake did Amanda make that resulted in an incorrect answer?

$$34 - 8 \div 2 + 3 \cdot 4$$

$$34 - 4 + 3 \cdot 4$$

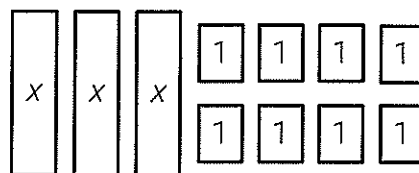
$$34 - 7 \cdot 4$$

$$34 - 28$$

$$6$$

- F. she added before multiplying      G. she subtracted before adding  
H. she multiplied before dividing      J. she added before dividing

3. Which of the following expressions is best represented by the model below?



- A.  $3x + 10$       C.  $3x + 6$   
B.  $3x - 2$       D.  $3x + 8$

4. Four students write algebraic expressions and equations on their white board. Which of the students wrote expressions?

STUDENT 1

$$\frac{1}{2}x + 6$$

STUDENT 2

$$3x = \frac{2}{3}$$

STUDENT 3

$$4 - \frac{3}{4} = x$$

STUDENT 4

$$5 - x$$

- F. Students 1 and 4      G. Students 2 and 3      H. Students 1, 3, and 4      J. Students 2 and 4

1. (A) (B) (C) (D)

2. (F) (G) (H) (J)

3. (A) (B) (C) (D)

4. (F) (G) (H) (J)

5. (A) (B) (C) (D)

6. (F) (G) (H) (J)

7. (A) (B) (C) (D)

8. (F) (G) (H) (J)

9. (A) (B) (C) (D)

10. Use the grid below.

+	0	0	0	0			0	0	
-	1	1	1	1			1	1	
	2	2	2	2			2	2	
	3	3	3	3			3	3	
	4	4	4	4			4	4	
	5	5	5	5			5	5	
	6	6	6	6			6	6	
	7	7	7	7			7	7	
	8	8	8	8			8	8	
	9	9	9	9			9	9	

5. Which two expressions are equivalent?

A.  $4(2 + x)$   
 $4 \cdot 2 + 2 \cdot x$

B.  $4 + 2 + x$   
 $(4 + 2) + x$

C.  $4 \cdot x + 2$   
 $4 \cdot (x + 2)$

D.  $4 \div (2 - x)$   
 $4 - 2 \div x$

6. Sara and her friends go to a football game and get snacks from the concessions. She uses various pictures to show what they ordered. Which of the following expressions best represents their order?



F.  $4d + h + 2f$

G.  $4d + 2h + 2f$

H.  $h + 2f + 5d$

J.  $2h + 4f + 3d$

7. Which of the following best represents a term in the expression below?

$$6x + 5^3 - 7y + 20$$

A. 7

B. 6

C.  $5^3$

D.  $y$

8. The expression below is evaluated when  $x = 9$ ,  $y = 3$ , and  $z = 2$ . What is the value of the expression?

$$8x - z^2 + 2y$$

F. 38

G. 16

H. 72

J. 74

9. Which of the set of expressions is equivalent?

A.  $3(2x + 5)$  and  $6x + 5$

B.  $2(3x + 5)$  and  $6x + 15$

C.  $3(2x + 5)$  and  $6x + 10$

D.  $2(3x + 5)$  and  $6x + 10$

10. Determine the value of the expression below.

$$9 + 3(10 \div 2) + 5^2$$

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.